

What is claimed is:

1. A print system comprising:

a terminal that generates original data;

a printer controller that converts the original data  
5 into print data; and

a printer that performs print operations for forming  
an image on a recording medium based on the print data,  
wherein the printer controller is connected between the  
terminal and the printer,

10 wherein the printer comprises a condition detector  
that detects a condition of the print operations and  
transmitting means for transmitting condition data  
indicating the condition of the print operations to at least  
one of the terminal and the printer controller;

15 at least one of the terminal and the printer  
controller comprises receiving means for receiving the  
condition data; and

at least one of the terminal and the printer  
controller comprises notifying means for notifying a user of  
20 progress of the print operations based on the condition data.

2. The print system according to claim 1, wherein the  
printer further comprises a print head that forms an image  
on a line basis on the recording medium while scanning in a  
predetermined direction, wherein the condition detector

25 detects a number of printed lines which have been printed by

the print head as the condition of the print operations.

3. The print system according to claim 1, wherein the printer controller further comprises transmitting means for transmitting a request signal to the printer, the request signal requesting the printer to transmit the condition data, wherein in response to the request signal, the condition detector detects the condition of the print operations, and the transmitting means of the printer transmits the condition data to the receiving means.

4. The print system according to claim 3, wherein the transmitting means of the printer controller transmits the request signal when requested by a user.

5. The print system according to claim 3, wherein the transmitting means of the printer controller transmits the request signal at a predetermined timing.

6. The print system according to claim 1, wherein the printer controller further comprises calculating means for calculating a total amount of the print data, and the notifying means notifies a user of the progress of print operations based on the condition data and the total amount of the print data.

7. The print system according to claim 1, wherein at least one of the terminal and the printer controller further comprises speed detecting means for detecting a print speed based on the condition data received a plurality of times at

different timings from the transmitting means of the printer, wherein the notifying means notifies a user of the progress of the print operations based further on the print speed.

8. The print system according to claim 7, wherein at least one of the terminal and the printer controller further comprises state detecting means for detecting a state of the print operations based on the print speed, the state detecting means detecting whether the print operations are in a proper state, a slowed down state or a stopped state, and the notifying means further notifies the user of the state of the print operations.

9. The print system according to claim 1, wherein the printer controller further comprises calculating means for calculating a total amount of the print data, and at least one of the terminal and the printer controller further comprises speed detecting means for detecting a print speed based on the condition data received a plurality of times at different timings from the printer, wherein the notifying means notifies a user of the progress of the print operations based on the total amount of the print data and the print speed.

10. The print system according to claim 1, wherein the printer controller further comprises calculating means for calculating a total data amount of the print data, and at least one of the terminal and the printer controller

5 further comprises a timer that measures a required time duration from when the print operations are started to when the receiving means receives the condition data, and predicting means for predicting a remaining time duration required for the printer to complete the print operations,

wherein the condition detector comprises a raster counter that counts a printed raster number;

10 the transmitting means of the printer transmits the condition data indicating the printed raster number as the condition of the print operations;

the predicting means predicts the remaining time duration based on the total data amount, the required time duration, and the condition data; and

15 the notifying means notifies a user of the remaining time duration as the progress of the print operations.

20 11. The print system according to claim 1, wherein the printer controller further comprises calculating means for calculating a total data amount of the print data, a timer that measures a required time duration from when the print operations are started to when the condition data is received, and time predicting means for predicting a completion time at which the print operations are completed, wherein

25 the condition detector comprises a raster counter that counts a printed raster number;

the transmitting means of the printer transmits the condition data indicating the printed raster number as the condition of the print operations;

the time predicting means predicts the completion time based on the total data amount, the required time duration, and the condition data; and

the notifying means notifies the user of the completion time as the progress of the print operations.

12. The print system according to claim 1, wherein the notifying means comprises a display that visually displays the progress of the print operations.

13. The print system according to claim 1, wherein the notifying means audibly notifies the user of the progress of the print operations using synthesized voice.

14. The print system according to claim 1, wherein the printer controller is a raster image processor.

15. A printer controller connected between a terminal and a printer, the terminal generating original data, the printer performing print operations based on print data for forming an image on a recording medium, the printer detecting a condition of the print operations and transmitting condition data indicating the condition, the printer controller comprising:

converting means for converting the original data into the print data;

receiving means for receiving the condition data from the printer; and

notifying means for notifying a user of progress of the print operations based on the condition data.

5 16. A printer controller connected between a terminal and a printer, the terminal generating original data, the printer performing print operations based on print data for forming an image on a recording medium, the printer detecting a condition of the print operations and transmitting condition data indicating the condition, the printer controller comprising;

10 converting means for converting the original data into the print data; and

15 relaying means for receiving the condition data from the printer and transmitting the condition data to the terminal.

17. A printer connected to a printer controller that converts original data received from a terminal into print data, the printer comprising:

20 a print unit that performs print operations based on the print data for forming an image on a recording medium;

a detector that detects a progress of the print operations; and

25 transmitting means for transmitting progress data indicating the condition of the print operations to the

printer controller.

18. A print progress notifying device comprising:

counting means for counting a printed raster number;

detecting means for detecting a total raster number of

5 print data;

a timer that measuring a required time duration from when print operations are started to when the counting means counts the printed raster number; and

10 predicting means for predicting at least one of a remaining time duration required for completing the print operations and a completion time at which the print operations are completed, based on the printed raster number, the total raster number, and the required time duration.

15 19. The print progress notifying device according to claim 18 further comprising a printer for performing the print operations and a computer that is connected to the printer, wherein the raster counter is provided to the printer, and the timer and the predicting means are provided to the computer.

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